## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015467 Address: 333 Burma Road **Date Inspected:** 05-Jul-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Mr. Huang min No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Orthotropic Box Girder (OBG)

### **Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

#### BAY-5

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 06127.

Magnetic Particle Testing (MT)

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The members are identified as OBG Traveler Rail bracket weld Components. Total number of welds MT Tested: 04 No's. The weld designations are review as follows:

- 1. TR1B-PP095-003
- 2. TR5B-PP095-004
- 3. TR5C-PP095, 097-005.

# WELDING INSPECTION REPORT

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BAY-6

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 06126.

MT

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The members are identified as OBG Bottom Panel weld Components. Total number of welds MT Tested: 38 No's. The weld designations are review as follows:

- 1. BP3039-001-019,020,031,032,043,044,055,056,067,068
- 2. BP3057-001-023,024,035,036,047,048,059,060
- 3. BP3035-001-019,020,031,032,043,044,055,056
- 4. BP3046-001-013~024

Signed off the following green tag:

1. 13297 ~ 13300.

This QA Inspector Randomly observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint WJF-0-473. Welder is identified as 062092. ZPMC Quality Control (QC) is identified as Mr. Zhao Jian Hang. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-3112-1. Refer the attached photo for reference.

SMAW welding of weld joint WJF-0-471. Welder is identified as 057795. ZPMC Quality Control (QC) is identified as Mr. Zhao Jian Hang. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-3112-1. Refer the attached photo for reference.

Submerged Arc Welding (SAW) of weld joint WJF-0-186. Welder is identified as 053748. ZPMC Quality Control (QC) is identified as Mr. Zhao Jian Hang. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-3221-TC-U4a-S-1.

BAY-7

SMAW Tack welding of weld joint EP3020-001-027/028. Welder is identified as 250833. ZPMC Quality Control (QC) is identified as Mr. Cui jun jie. The welding variables appeared to comply with the Applicable WPS: WPS-B- P-2112.

SMAW Tack welding of weld joint EP3015-001-081/082. Welder is identified as 049485. ZPMC Quality Control (QC) is identified as Mr. Cui jun jie. The welding variables appeared to comply with the Applicable WPS: WPS-B- P-2112.

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#### BAY-8

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 06127.

MT

This QA performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated MT report for this date. The members are identified as OBG Retrofit weld Components. Total number of welds MT Tested: 38 No's. The weld designations are review as follows:

- 1. RETRO-A-05-019,020,021-001,002
- 2. RETRO-A-07-019,020,021-001,002
- 3. RETRO-A-01-145,147~155-001,002
- 4. RETRO-A-02-037,038,039-001,002

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





#### **Summary of Conversations:**

Only general conversation was held between QA and Quality Control (QC) concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer